

IN THE CLAIMS:

1. (Currently amended) A method for ~~modulating~~ ~~decreasing~~ primordial germ cells numbers in an avian embryo, the method comprising immunizing a female bird with an antigen associated with primordial germ cells development, whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies that bind to the antigen expressed by an avian embryo present within the egg, ~~to thereby decrease~~ wherein endogenous Primordial Germ Cell numbers in the avian embryo are decreased.
2. (Original) The method according to Claim 1, wherein the female bird is selected from the group consisting of chicken, turkey, duck, quail, and sand hill crane.
3. (Original) The method according to claim 3, wherein the female bird is a chicken.
4. (Original) The method according to Claim 1, wherein the antigen comprises an epitope of a polypeptide selected from the group consisting of SSEA-1, VASA, EMA-1, germ cell-less, dead end, nanos, stella, fragilis, and DAZL.
- 5-6. (Canceled)
7. (Currently amended) A method for ~~modulating~~ inhibiting primordial germ cell development in an avian embryo, the method comprising immunizing a female bird with an antigen associated with primordial germ cells development, whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies that bind to the antigen expressed by an avian embryo present within the egg, ~~to thereby inhibit~~ wherein development of Primordial Germ Cells in the avian embryo is inhibited.
8. (Original) The method according to Claim 7, wherein the antigen comprises an epitope of a polypeptide selected from the group consisting of SSEA-1, VASA, EMA-1, germ cell-less, dead end, nanos, stella, fragilis, and DAZL.

9. (Original) The method according to Claim 7, wherein the female bird is selected from the group consisting of chicken, turkey, duck, quail, and sand hill crane.
10. (Original) The method according to claim 9, wherein the female bird is a chicken.
- 11-57. (Canceled)
58. (Currently amended) A method for reducing primordial germ cell numbers, inhibiting primordial germ cell development, or both in an avian embryo, the method comprising:
  - (a) providing a female avian selected from the group consisting of a chicken and a turkey;
  - (b) immunizing the female avian with an antigen associated with primordial germ cells selected from the group consisting of SSEA-1, VASA, EMA-1, germ cell-less, dead end, nanos, stella, fragilis, and DAZL,  
wherein the immunizing results in an egg produced by the female avian comprising a sufficiently high concentration of antibodies that bind to the antigen ~~to decrease wherein~~ endogenous primordial germ cell numbers are decreased, ~~inhibit~~ primordial germ cell development is inhibited, or both in an avian embryo present within the egg.
59. (Previously presented) The method of claim 58, wherein the antigen associated with primordial germ cells is selected from the group consisting of VASA and DAZL.
60. (Previously presented) The method of claim 59, wherein the antigen associated with primordial germ cells comprises any of SEQ ID NOs: 3, 4, 7, and 8.
61. (Withdrawn) The method of claim 58, wherein the immunizing is with at least two antigens associated with primordial germ cells selected from the group consisting of SSEA-1, VASA, EMA-1, germ cell-less, dead end, nanos, stella, fragilis, and DAZL.

62. (Withdrawn) The method of claim 61, wherein the at least two antigens are VASA and DAZL.
63. (Withdrawn) The method of claim 58, further comprising repopulating the avian embryo with donor primordial germ cells.
64. (Withdrawn) The method of claim 63, wherein the donor primordial germ cells are from the same species as is the avian embryo.
65. (Withdrawn) The method of claim 64, wherein the avian embryo is a chicken.
66. (Withdrawn) The method of claim 63, wherein the donor primordial germ cells are from a different species as is the avian embryo.
67. (Withdrawn) The method of claim 66, wherein the female avian is a chicken and the donor primordial germ cells are turkey primordial germ cells.
68. (Withdrawn) The method of claim 58, further comprising incubating the avian embryo to hatch.
69. (New) A method for decreasing primordial germ cells numbers in an avian embryo, the method comprising immunizing a female bird with an amount of antigen associated with primordial germ cell development sufficient to generate an antibody response in the bird whereby an egg produced by the female bird comprises antibodies that bind to the antigen expressed by an avian embryo present within the egg, wherein endogenous Primordial Germ Cell numbers in the avian embryo are decreased.
70. (New) The method of claim 69, wherein the amount of antigen ranges from about 50-200 µg.
71. (New) The method of claim 69, wherein the antigen is DAZL.